

**WHAT IS CLAIMED IS:**

1        1.     A method comprising:  
2                 advancing a member into a nucleus pulposus of an intervertebral disc by blunt  
3     dissection, the nucleus pulposus having a volume, and  
4                 applying radiofrequency energy from the member to decrease the volume of the  
5     nucleus pulposus.

1        2.     The method of claim 1 wherein applying radiofrequency energy removes  
2     material of the nucleus pulposus.

1        3.     The method of claim 1 wherein applying radiofrequency energy removes  
2     water of the nucleus pulposus.

1        4.     The method of claim 1 wherein applying radiofrequency energy removes disc  
2     tissue of the nucleus pulposus.

1        5.     The method of claim 2 or 3 wherein applying radiofrequency energy removes  
2     disc tissue of the nucleus pulposus.

1        6.     The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy  
2     from the member to decrease the volume of the nucleus pulposus reduces pressure in the  
3     intervertebral disc.

1        7.     The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy to  
2     decrease the volume of the nucleus pulposus comprises ablating material of the nucleus  
3     pulposus.

1        8.     The method of claim 1, 2, 3, or 4 further comprising denervating at least a  
2     portion of the intervertebral disc with the applied radiofrequency energy.

1           9.       The method of claim 1, 2, 3, or 4 wherein advancing the member comprises  
2       advancing the member through an introducer.

1           10.      The method of claim 1, 2, 3, or 4 wherein advancing the member comprises  
2       advancing the member beyond a central region of the nucleus pulposus.

1           11.      The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy  
2       comprises applying radiofrequency energy from an electrode of the member.

1           12.      The method of claim 11 further comprising advancing the electrode beyond an  
2       introducer.

1           13.      The method of claim 11 further comprising providing the member with a  
2       bipolar electrode configuration.

1           14.      The method of claim 1 further comprises applying rotation to a proximal  
2       region of the member to rotate a distal region of the member within the nucleus pulposus.

1           15.      The method of claim 1 or 14 further comprising positioning a portion of the  
2       member at an inner wall of an annulus fibrosus of the intervertebral disc.

1           16.      The method of claim 1 or 14 wherein advancing the member  
2       comprises advancing the member along a curved path.

1           17.      The method of claim 1 further comprising providing the member with a total  
2       length between 5 and 24 inches.

1           18.      The method of claim 1 further comprising providing the member in the form  
2       of a catheter.

1           19.      The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy  
2       comprises applying radiofrequency energy to an inner wall of an annulus fibrosus.

1        20. The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy  
2 comprises applying radiofrequency energy while the member is positioned at a location  
3 adjacent an inner wall of an annulus fibrosus.

1        21. The method of claim 1, 2, 3, or 4 wherein applying radiofrequency energy  
2 comprises applying radiofrequency energy to multiple locations in the intervertebral disc.

1        22. The method of claim 21 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations simultaneously.

1        23. The method of claim 21 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using separate  
3 energy delivery elements of the member.

1        24. The method of claim 21 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations serially.

1        25. The method of claim 21 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using a single  
3 energy delivery element of the member.

1        26. The method of claim 1, 2, 3, or 4 further comprising advancing the member  
2 along an inner wall of an annulus fibrosus.

1        27. A method comprising:  
2            advancing a member through a nucleus pulposus of an intervertebral disc beyond a  
3            central region of the nucleus pulposus, the nucleus pulposus having a volume, and  
4            applying radiofrequency energy from the member to decrease the volume of the  
5            nucleus pulposus.

1           28. The method of claim 27 wherein applying radiofrequency energy removes  
2 material of the nucleus pulposus.

1           29. The method of claim 27 wherein applying radiofrequency energy removes  
2 water of the nucleus pulposus.

1           30. The method of claim 27 wherein applying radiofrequency energy removes  
2 disc tissue of the nucleus pulposus.

1           31. The method of claim 28 or 29 wherein applying radiofrequency energy  
2 removes disc tissue of the nucleus pulposus.

1           32. The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2 energy from the member to decrease the volume of the nucleus pulposus reduces pressure in  
3 the intervertebral disc.

1           33. The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2 energy to decrease the volume of the nucleus pulposus comprises ablating material of the  
3 nucleus pulposus.

1           34. The method of claim 27, 28, 29, or 30 further comprising denervating at least  
2 a portion of the intervertebral disc with the applied radiofrequency energy.

1           35. The method of claim 27, 28, 29, or 30 wherein advancing the member  
2 comprises advancing the member through an introducer.

1           36. The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy from an electrode of the member.

1           37. The method of claim 36 further comprising advancing the electrode beyond an  
2 introducer.

1           38.    The method of claim 36 further comprising providing the member with a  
2   bipolar electrode configuration.

1           39.    The method of claim 27 further comprising applying rotation to a proximal  
2   region of the member to rotate a distal region of the member within the nucleus pulposus.

1           40.    The method of claim 27 or 39 further comprising positioning a portion of the  
2   member at an inner wall of an annulus fibrosus of the intervertebral disc.

1           41.    The method of claim 27 or 39 wherein advancing the member comprises  
2   advancing the member along a curved path.

1           42.    The method of claim 27 further comprising providing the member with a total  
2   length between 5 and 24 inches.

1           43.    The method of claim 27 further comprising providing the member in the form  
2   of a catheter.

1           44.    The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2   energy comprises applying radiofrequency energy to an inner wall of an annulus fibrosus.

1           45.    The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2   energy comprises applying radiofrequency energy while the member is positioned at a  
3   location adjacent an inner wall of an annulus fibrosus.

1           46.    The method of claim 27, 28, 29, or 30 wherein applying radiofrequency  
2   energy comprises applying radiofrequency energy to multiple locations in the intervertebral  
3   disc.

1           47.    The method of claim 46 wherein applying radiofrequency energy to multiple  
2   locations comprises applying radiofrequency energy to the multiple locations simultaneously.

1       48. The method of claim 46 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using separate  
3 energy delivery elements of the member.

1       49. The method of claim 46 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations serially.

1       50. The method of claim 46 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using a single  
3 energy delivery element of the member.

1       51. The method of claim 27, 28, 29, or 30 further comprising advancing the  
2 member along an inner wall of an annulus fibrosus.

1       52. A method comprising:  
2           advancing a radiofrequency electrode into a nucleus pulposus of an intervertebral disc  
3           by blunt dissection, the nucleus pulposus having a volume, and  
4           activating the electrode to decrease the volume of the nucleus pulposus.

1       53. The method of claim 52 wherein activating the electrode to decrease the  
2 volume of the nucleus pulposus reduces pressure in the intervertebral disc.

1       54. The method of claim 52 or 53 wherein activating the electrode to decrease the  
2 volume of the nucleus pulposus comprises ablating material of the nucleus pulposus.

1       55. The method of claim 52 or 53 wherein advancing the electrode comprises  
2 advancing the electrode beyond a central region of the nucleus pulposus.

1       56. The method of claim 52 wherein advancing the electrode further comprises  
2 advancing a bipolar electrode configuration.

1       57. The method of claim 52 or 56 further comprising positioning the electrode at  
2 an inner wall of an annulus fibrosus of the intervertebral disc.

1       58. The method of claim 52 or 56 wherein advancing the electrode  
2 comprises advancing the electrode along a curved path.

1       59. The method of claim 52 or 53 wherein activating the electrode comprises  
2 activating the electrode while the electrode is positioned at a location adjacent an inner wall  
3 of an annulus fibrosus.

1       60. The method of claim 52 or 53 wherein activating the electrode comprises  
2 delivering radiofrequency energy from the electrode to multiple locations in the  
3 intervertebral disc.

1       61. The method of claim 60 wherein delivering radiofrequency energy to multiple  
2 locations comprises delivering radiofrequency energy from the electrode to the multiple  
3 locations simultaneously.

1       62. The method of claim 60 wherein delivering radiofrequency energy to multiple  
2 locations comprises delivering radiofrequency energy from the electrode to the multiple  
3 locations serially.

1       63. The method of claim 52 or 53 further comprising advancing the electrode  
2 along an inner wall of an annulus fibrosus.

1       64. A method comprising:  
2           advancing a radiofrequency electrode through a nucleus pulposus of an intervertebral  
3 disc beyond a central region of the nucleus pulposus, the nucleus pulposus having a volume,  
4 and  
5           activating the electrode to decrease the volume of the nucleus pulposus.

1           65.    The method of claim 64 wherein activating the electrode to decrease the  
2   volume of the nucleus pulposus reduces pressure in the intervertebral disc.

1           66.    The method of claim 64 or 65 wherein activating the electrode to decrease the  
2   volume of the nucleus pulposus comprises ablating material of the nucleus pulposus.

1           67.    The method of claim 64 wherein advancing the electrode further comprises  
2   advancing a bipolar electrode configuration.

1           68.    The method of claim 64 or 67 further comprising positioning the electrode at  
2   an inner wall of an annulus fibrosus of the intervertebral disc.

1           69.    The method of claim 64 or 67 wherein advancing the electrode  
2   comprises advancing the electrode along a curved path.

1           70.    The method of claim 64 or 65 wherein activating the electrode comprises  
2   activating the electrode while the electrode is positioned at a location adjacent an inner wall  
3   of an annulus fibrosus.

1           71.    The method of claim 64 or 65 wherein activating the electrode comprises  
2   delivering radiofrequency energy from the electrode to multiple locations in the  
3   intervertebral disc.

1           72.    The method of claim 71 wherein delivering radiofrequency energy to multiple  
2   locations comprises delivering radiofrequency energy from the electrode to the multiple  
3   locations simultaneously.

1           73.    The method of claim 71 wherein delivering radiofrequency energy to multiple  
2   locations comprises delivering radiofrequency energy from the electrode to the multiple  
3   locations serially.

1           74.    The method of claim 64 or 65 further comprising advancing the electrode  
2    along an inner wall of an annulus fibrosus.

1           75.    A method comprising:  
2           advancing a member into a nucleus pulposus of an intervertebral disc by blunt  
3    dissection, and  
4           applying radiofrequency energy from the member to remove material of the nucleus  
5    pulposus.

1           76.    The method of claim 75 wherein applying radiofrequency energy removes  
2    water of the nucleus pulposus.

1           77.    The method of claim 75 wherein applying radiofrequency energy removes  
2    disc tissue of the nucleus pulposus.

1           78.    The method of claim 76 wherein applying radiofrequency energy removes  
2    disc tissue of the nucleus pulposus.

1           79.    The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2    energy from the member to remove material of the nucleus pulposus reduces pressure in the  
3    intervertebral disc.

1           80.    The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2    energy from the member to remove material of the nucleus pulposus comprises ablating  
3    material of the nucleus pulposus.

1           81.    The method of claim 75, 76, 77, or 78 further comprising denervating at least  
2    a portion of the intervertebral disc with the applied radiofrequency energy.

1           82.    The method of claim 75, 76, 77, or 78 wherein advancing the member  
2    comprises advancing the member through an introducer.

1       83.    The method of claim 75, 76, 77, or 78 wherein advancing the member  
2 comprises advancing the member beyond a central region of the nucleus pulposus.

1       84.    The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy from an electrode of the member.

1       85.    The method of claim 84 further comprising advancing the electrode beyond an  
2 introducer.

1       86.    The method of claim 84 further comprising providing the member with a  
2 bipolar electrode configuration.

1       87.    The method of claim 75 further comprising applying rotation to a proximal  
2 region of the member to rotate a distal region of the member within the nucleus pulposus.

1       88.    The method of claim 75 or 87 further comprising positioning a portion of the  
2 member at an inner wall of an annulus fibrosus of the intervertebral disc.

1       89.    The method of claim 75 or 87 wherein advancing the member  
2 comprises advancing the member along a curved path.

1       90.    The method of claim 75 further comprising providing the member with a total  
2 length between 5 and 24 inches.

1       91.    The method of claim 75 further comprising providing the member in the form  
2 of a catheter.

1       92.    The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy to an inner wall of an annulus fibrosus.

1       93. The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy while the member is positioned at a  
3 location adjacent an inner wall of an annulus fibrosus.

1       94. The method of claim 75, 76, 77, or 78 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy to multiple locations in the intervertebral  
3 disc.

1       95. The method of claim 94 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations simultaneously.

1       96. The method of claim 94 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using separate  
3 energy delivery elements of the member.

1       97. The method of claim 94 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations serially.

1       98. The method of claim 94 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using a single  
3 energy delivery element of the member.

1       99. The method of claim 75, 76, 77, or 78 further comprising advancing the  
2 member along an inner wall of an annulus fibrosus.

1       100. A method comprising:  
2           advancing a member through a nucleus pulposus of an intervertebral disc beyond a  
3           central region of the nucleus pulposus, and  
4           applying radiofrequency energy from the member to remove material of the nucleus  
5           pulposus.

1           101. The method of claim 100 wherein applying radiofrequency energy removes  
2 water of the nucleus pulposus.

1           102. The method of claim 100 wherein applying radiofrequency energy removes  
2 disc tissue of the nucleus pulposus.

1           103. The method of claim 101 wherein applying radiofrequency energy removes  
2 disc tissue of the nucleus pulposus.

1           104. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy from the member to remove material of the nucleus pulposus reduces pressure in the  
3 intervertebral disc.

1           105. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy from the member to remove material of the nucleus pulposus comprises ablating  
3 material of the nucleus pulposus.

1           106. The method of claim 100, 101, 102, or 103 further comprising denervating at  
2 least a portion of the intervertebral disc with the applied radiofrequency energy.

1           107. The method of claim 100, 101, 102, or 103 wherein advancing the member  
2 comprises advancing the member through an introducer.

1           108. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy from an electrode of the member.

1           109. The method of claim 108 further comprising advancing the electrode beyond  
2 an introducer.

1           110. The method of claim 108 further comprising providing the member with a  
2 bipolar electrode configuration.

1           111. The method of claim 100 further comprises applying rotation to a proximal  
2 region of the member to rotate a distal region of the member within the nucleus pulposus.

1           112. The method of claim 100 or 111 further comprising positioning a portion of  
2 the member at an inner wall of an annulus fibrosus of the intervertebral disc.

1           113. The method of claim 100 or 111 wherein advancing the member comprises  
2 advancing the member along a curved path.

1           114. The method of claim 100 further comprising providing the member with a  
2 total length between 5 and 24 inches.

1           115. The method of claim 100 further comprising providing the member in the  
2 form of a catheter.

1           116. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy to an inner wall of an annulus fibrosus.

1           117. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy while the member is positioned at a  
3 location adjacent an inner wall of an annulus fibrosus.

1           118. The method of claim 100, 101, 102, or 103 wherein applying radiofrequency  
2 energy comprises applying radiofrequency energy to multiple locations in the intervertebral  
3 disc.

1           119. The method of claim 118 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations simultaneously.

1           120. The method of claim 118 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using separate  
3 energy delivery elements of the member.

1       121. The method of claim 118 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations serially.

1       122. The method of claim 118 wherein applying radiofrequency energy to multiple  
2 locations comprises applying radiofrequency energy to the multiple locations using a single  
3 energy delivery element of the member.

1       123. The method of claim 100, 101, 102, or 103 further comprising advancing the  
2 member along an inner wall of an annulus fibrosus.

1       124. A method comprising:  
2           advancing a radiofrequency electrode into a nucleus pulposus of an intervertebral disc  
3           by blunt dissection, and  
4           activating the electrode to remove material of the nucleus pulposus.

1       125. The method of claim 124 wherein activating the electrode to remove material  
2 of the nucleus pulposus reduces pressure in the intervertebral disc.

1       126. The method of claim 124 or 125 wherein activating the electrode to remove  
2 material of the nucleus pulposus comprises ablating material of the nucleus pulposus.

1       127. The method of claim 124 or 125 wherein advancing the electrode comprises  
2 advancing the electrode beyond a central region of the nucleus pulposus.

1       128. The method of claim 124 wherein advancing the electrode further comprises  
2 advancing a bipolar electrode configuration.

1       129. The method of claim 124 or 128 further comprising positioning the electrode  
2 at an inner wall of an annulus fibrosus of the intervertebral disc.

1           130. The method of claim 124 or 128 wherein advancing the electrode  
2 comprises advancing the electrode along a curved path.

1           131. The method of claim 124 or 125 wherein activating the electrode comprises  
2 activating the electrode while the electrode is positioned at a location adjacent an inner wall  
3 of an annulus fibrosus.

1           132. The method of claim 124 or 125 wherein activating the electrode comprises  
2 delivering radiofrequency energy from the electrode to multiple locations in the  
3 intervertebral disc.

1           133. The method of claim 132 wherein delivering radiofrequency energy to  
2 multiple locations comprises delivering radiofrequency energy from the electrode to the  
3 multiple locations simultaneously.

1           134. The method of claim 132 wherein delivering radiofrequency energy to  
2 multiple locations comprises delivering radiofrequency energy from the electrode to the  
3 multiple locations serially.

1           135. The method of claim 124 or 125 further comprising advancing the electrode  
2 along an inner wall of an annulus fibrosus.

1           136. A method comprising:  
2           advancing a radiofrequency electrode through a nucleus pulposus of an intervertebral  
3 disc beyond a central region of the nucleus pulposus, and  
4           activating the electrode to remove material of the nucleus pulposus.

1           137. The method of claim 136 wherein activating the electrode to remove material  
2 of the nucleus pulposus reduces pressure in the intervertebral disc.

1           138. The method of claim 136 or 137 wherein activating the electrode to remove  
2 material of the nucleus pulposus comprises ablating material of the nucleus pulposus.

1       139. The method of claim 136 wherein advancing the electrode further comprises  
2 advancing a bipolar electrode configuration.

1       140. The method of claim 136 or 139 further comprising positioning the electrode  
2 at an inner wall of an annulus fibrosus of the intervertebral disc.

1       141. The method of claim 136 or 139 wherein advancing the electrode  
2 comprises advancing the electrode along a curved path.

1       142. The method of claim 136 or 137 wherein activating the electrode comprises  
2 activating the electrode while the electrode is positioned at a location adjacent an inner wall  
3 of an annulus fibrosus.

1       143. The method of claim 136 or 137 wherein activating the electrode comprises  
2 delivering radiofrequency energy from the electrode to multiple locations in the  
3 intervertebral disc.

1       144. The method of claim 143 wherein delivering radiofrequency energy to  
2 multiple locations comprises delivering radiofrequency energy from the electrode to the  
3 multiple locations simultaneously.

1       145. The method of claim 143 wherein delivering radiofrequency energy to  
2 multiple locations comprises delivering radiofrequency energy from the electrode to the  
3 multiple locations serially.

1       146. The method of claim 136 or 137 further comprising advancing the electrode  
2 along an inner wall of an annulus fibrosus.

1       147. The method of claim 1 wherein advancing the member into the nucleus  
2 pulposus comprises conforming the member sufficiently to an inner wall of an annulus  
3 fibrosus to contact multiple locations on the inner wall.